TrueNAS® Mini E Hardware Upgrades Guide

Version 1.1

This guide describes the procedures to safely open the case and install the various hardware upgrades that are available from iXsystems.

Contents

1 Part Locations 2
2 Preparation 3
2.1 Anti-Static Precautions 3
2.2 Opening the Case 4
3 Upgrading Memory 5
3.1 Installing Memory 6
4 Solid State Disk (SSD) Upgrades 7
4.1 Mini SSD Mounting 7
4.2 SSD Cabling 8
5 Closing the Case 8
6 Additional Resources 9
7 Contacting iXsystems 9

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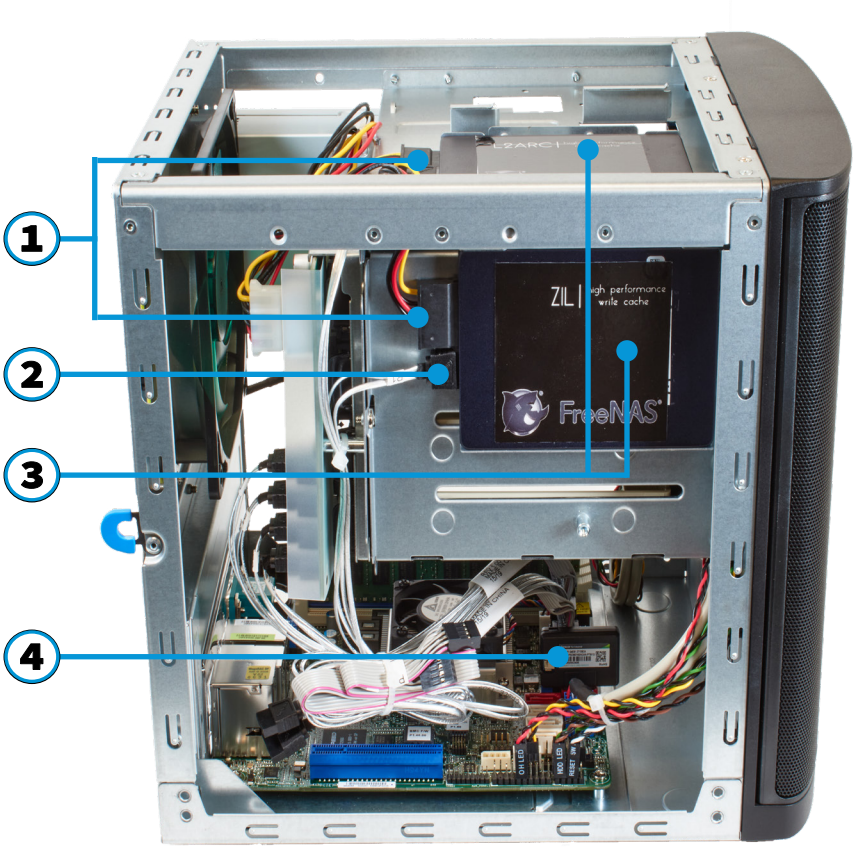
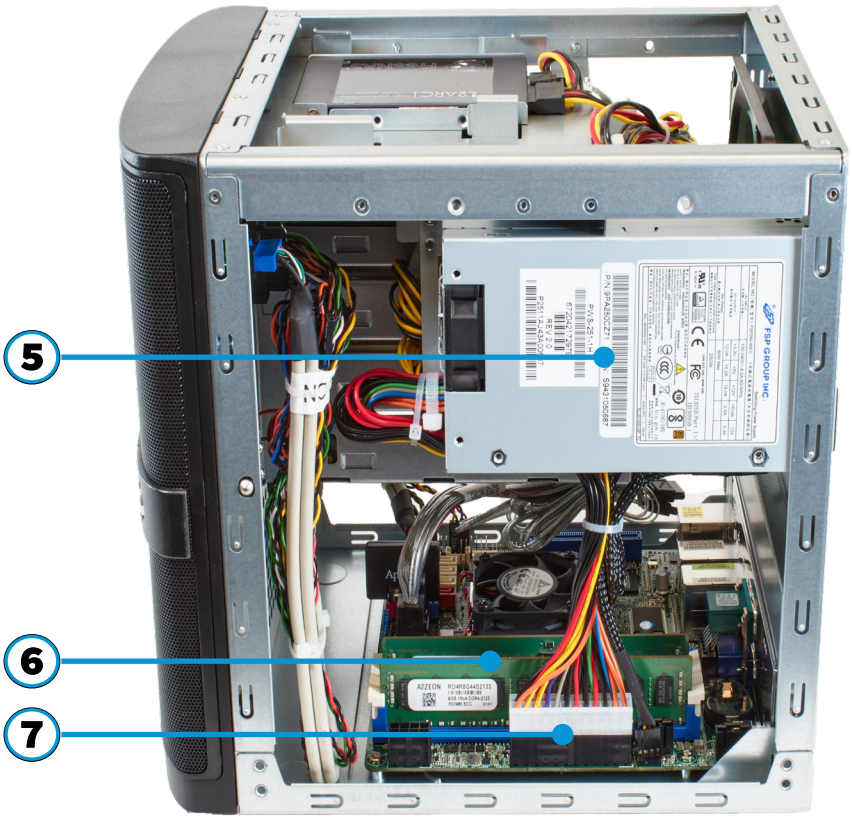
1 Part Locations

1 SSD Power Cables
2 SSD Data Cable
3 SSD Mounting Trays (with SSDs)
4 SataDOM



5 Power Supply
6 Memory Slots
7 Power Connector



2 Preparation

A Philips screwdriver is needed for screws and a cutting instrument for any zip ties. Shut down the TrueNAS system and unplug the power cable. Note where any other cables are connected to the back of the system and unplug them also. If a “Tamper Resistant” sticker is present, removing or cutting it to remove the case does not affect the system warranty.

2.1 Anti-Static Precautions

Static electricity can build up in your body and discharge when touching conductive materials. Electrostatic Discharge (ESD) is very harmful to sensitive electronic devices and components. Keep these safety recommendations in mind before opening the system case or handling system components:

1. Turn off the system and remove the power cable before opening the system case or touching any internal components.

2. Place the system on a clean, hard work surface like a wooden tabletop. Using an ESD dissipative mat can also help protect the internal components.

3. Touch the metal chassis of the Mini with your bare hand before touching any internal component, including components not yet installed in the system. This redirects static electricity in your body away from the sensitive internal components. Using an anti-static wristband and grounding cable is another option.

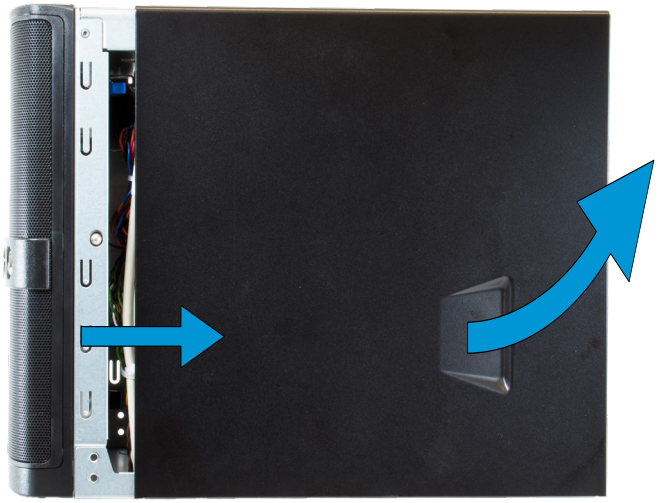
4. Store all system components in anti-static bags.

More details about ESD and preventative tips can be found on https://www.wikihow.com/Ground-Yourself-to-Avoid-Destroying-a-Computer-with-Electrostatic-Discharge

2.2 Opening the Case

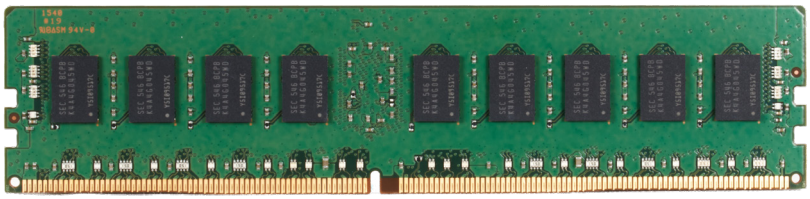
Unscrew the four thumbscrews on the back of the Mini:

Slide the black metal cover off the back of the chassis by lifting the blue retention lever, grasping the sides, and pushing the cover and chassis back panel apart. When the cover can no longer move away from chassis frame, gently lift the cover up and away from the chassis frame.



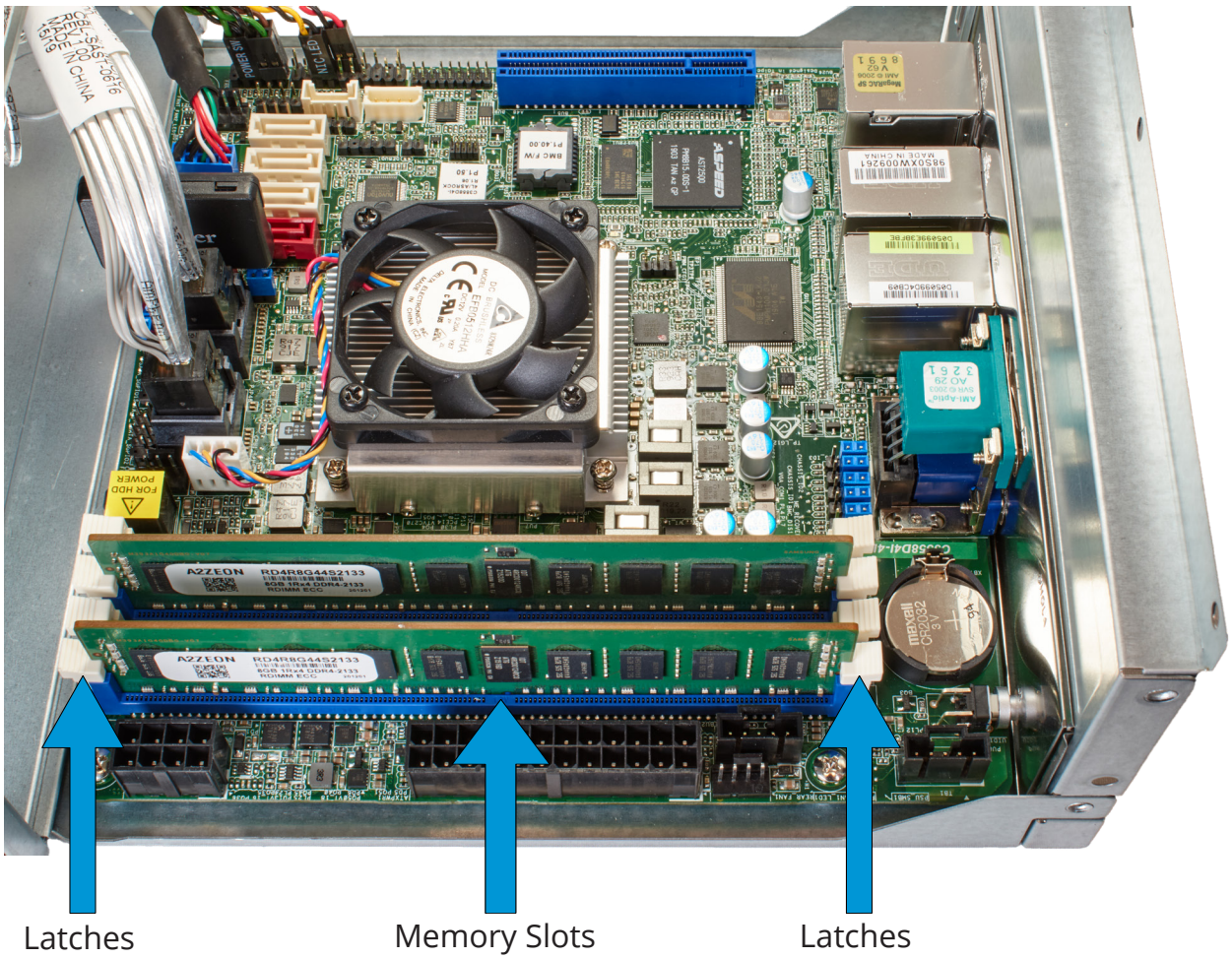
3 Upgrading Memory

A memory upgrade includes one or more inline memory modules:



The Mini E motherboard has two memory slots. The default memory is typically installed in the blue slots, with any memory upgrades installed in the white slots

Each slot has latches on the ends to secure the memory in place. These latches need to be pushed open before installing the memory, but will automatically close as the module is pushed into place.



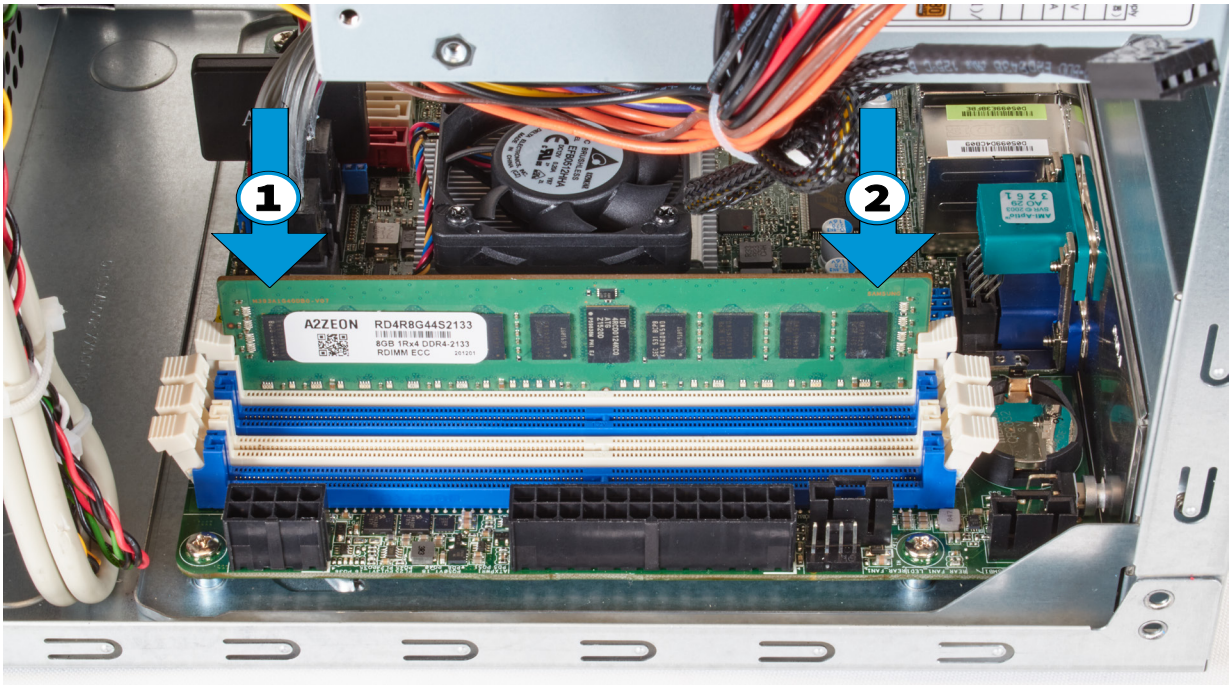
3.1 Installing Memory

Memory is installed in same-capacity pairs in the matching color slots. Systems typically have memory already installed in the blue sockets, with the white slots reserved for additional memory.

Prepare the motherboard by pushing down on the memory latches to open them. These latches re-close as the memory is pushed into the motherboard slot, securing the memory in module in place.

Touch the metal chassis to discharge any static, then open the plastic package containing a memory module. Avoid touching the gold edge connector on the module. Line up the notch in the bottom of the memory module with the key in the socket. The notch is offset to one end. If the notch does not line up with the key built into the socket, flip the memory module around end-to-end.

Gently guide the module into the slot, pressing down on one end of the module until the hinged latch swings in, locking into place. Press down on the other end until that latch also locks into place. Repeat this process for each memory module to install.

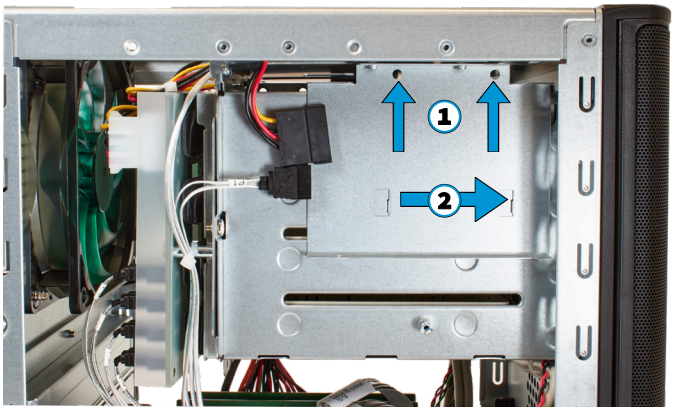


4 Solid State Disk (SSD) Upgrades

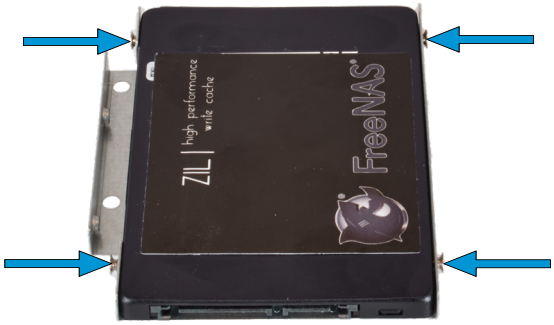
The SSD upgrade includes one or two SSD drives and mounting screws. Each SSD can be mounted in either tray without affecting system operation.

4.1 Mini SSD Mounting

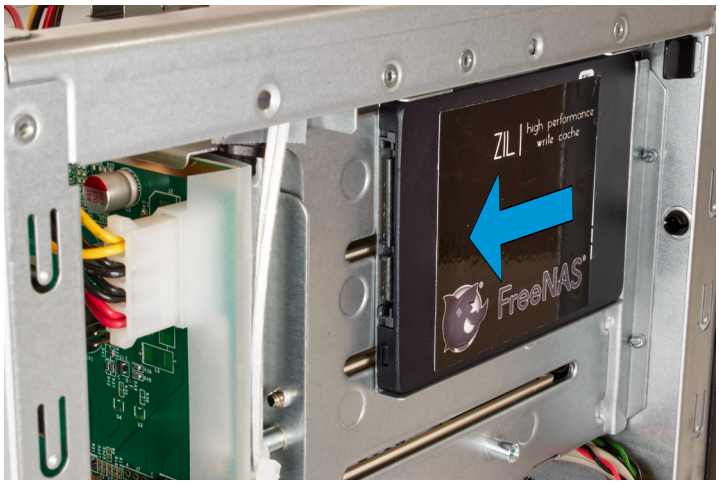
The Mini E has two SSD trays, one on the top and one on the side of the system. Remove the two screws that secure the SSD tray to the system, then slide the tray forward to remove it.



Mount an SSD in the tray with four small screws, one at each corner. Make sure the SSD power and SATA connectors are pointed towards the back of the tray so the cables can be properly attached.



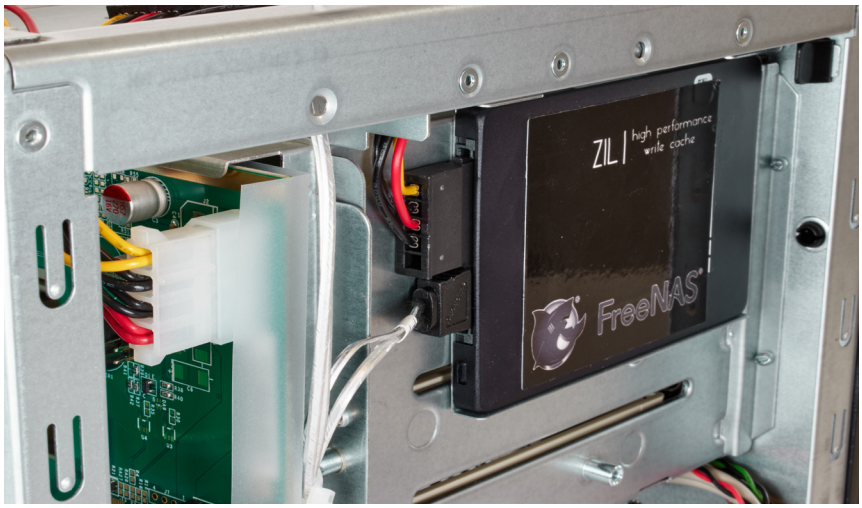
Replace the tray on the chassis by aligning the tray retention clips with the holes in the chassis, sliding the tray into place, and reattaching the original screws. Repeat the process if a second SSD is being installed.



4.2 SSD Cabling

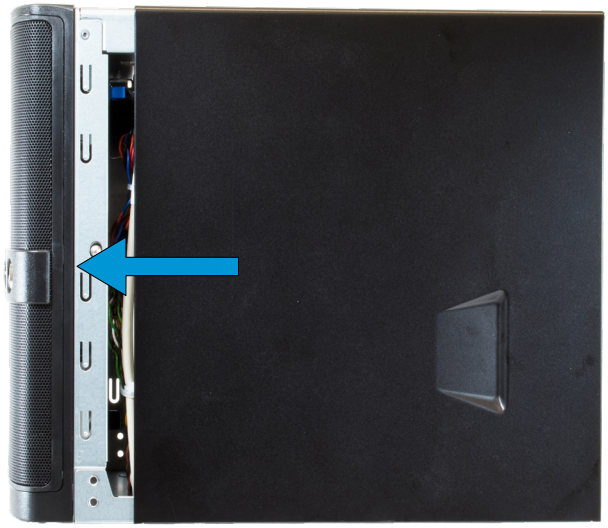
Additional power and data cables are already installed in the system, but you might need to cut a zip tie for the cables to reach the SSD. Attach these cables to each SSD by aligning the L-shaped keys on the cables and ports and gently pushing each cable into the port until it is firmly seated.

Inspect the cables to ensure they are not rubbing against a sharp metal edge or sticking out where they can be pinched or snagged when the case is slid back on.



5 Closing the Case

Place the cover over the chassis and push the connectors over the bottom of the frame. Slide the case forward until the retention lever clicks into place. Replace the thumbscrews in the back to secure the cover to the chassis.



6 Additional Resources

The TrueNAS User Guide has complete software configuration and usage instructions. It is available by clicking **Guide** in the TrueNAS web interface or going directly to:

https://www.truenas.com/docs/

Additional guides, datasheets, and knowledge base articles are available in the iX Information Library at:

https://www.ixsystems.com/library/

The TrueNAS forums provide an opportunity to interact with other TrueNAS users and to discuss their configurations. The forums are available at:

https://ixsystems.com/community/forums/

7 Contacting iXsystems

For assistance, please contact iX Support:

Contact Method	Contact Options
Web	https://support.ixsystems.com
Email	support@iXsystems.com
Telephone	Monday-Friday, 6:00AM to 6:00PM Pacific Standard Time: • US-only toll-free: 855-473-7449 option 2 • Local and international: 408-943-4100 option 2
Telephone	Telephone After Hours (24x7 Gold Level Support only): • US-only toll-free: 855-499-5131 • International: 408-878-3140 (International calling rates will apply)